

**REMARKS**

Claims 1-14 are pending. Claims 1 and 4-6 are amended hereby. A marked-up version showing the changes made by the present amendment is attached hereto as "**Version with markings to show changes made.**"

Applicants affirm the election of claims 1-6. Claims 7-14 stand withdrawn from further consideration as being directed to non-elected inventions.

Claims 1-6 were rejected under 35 USC §112, second paragraph, as being indefinite. It is respectfully submitted that the amendments made herein overcome the rejection. Favorable reconsideration is earnestly solicited.

Claims 1, 2 and 4-6 were rejected under 35 USC §103(a) as being unpatentable over Soeda et al. in view of Yamanaka et al. Favorable reconsideration of this rejection is requested in view of the amendments made herein.

The Examiner argues that Soeda et al. discloses all of the features of the claims with the exception of the specific calixarene charge control agent and amounts thereof. Yamanaka et al. is applied by the Examiner for allegedly rendering these features obvious.

In making the rejection, the Examiner does not identify which element of Soeda et al. is considered to correspond to the claimed infrared absorbing compound. However, it appears that the Examiner considers the azomethine dye as corresponding to both the claimed colorant and the claimed infrared absorbing compound since the azomethine dye absorbs in wavelengths of 800 to 1400 nm.

Claim 1 has been amended to clarify that the colorant and the infrared absorbing compound

are not the same. As such, the combination of Soeda et al. and Yamanaka et al. fails to teach or suggest the presently claimed invention.

Furthermore, each of the references is directed to use of a toner in a heat roller fixing system, not a photofixing system. Both of the copying machines disclosed at column 32, line 28 of Soeda et al. and at column 11, line 4 of Yamanaka et al. are designed to be fixed in a heat roller fixing system.

Claims 1-6 were rejected under 35 USC §103(a) as being unpatentable over Kushino et al. (U. S. Patent No. 6,136,488) in view of Yamanaka et al. '467. In this rejection, Kushino et al. is applied by the Examiner for allegedly teaching all the features of the claims with the exception of the specific calixarene compound as a charge control agent. Yamanaka et al. '467 is again applied for its disclosure of the specific calixarene compound and amounts thereof. Favorable reconsideration of this rejection is earnestly solicited.

Kushino et al. describes examples of charge controlling agents at column 20, lines 12-26. Although Kushino et al. does not specifically describe calixarene as a charge controlling agent, it does discuss such a charge controlling agent is preferred to have no color or a light color. Yamanaka et al. '467 describes its calixarene compound as "an excellent charge-control agent."

In the Background of the Invention of the present application, it is discussed at page 4, lines 17-23, that since the infrared absorbing agent compound and the charge controlling agent react with each other during heating when manufacturing the toner, both the infrared ray absorbing power and the charging power of the toner are thus lost, thereby making it almost impossible to use both agents in a simple combination. Thus, one of ordinary skill in the art would not have simply employed a calixarene compound as a charge control agent of Kushino et al.

In addition, one of ordinary skill in the art would not have combined the references since

Kushino is directed to a flash fixing toner whereas Yamanaka et al. is directed to a heat roller fixing system.

Claims 1, 2 and 4-6 were rejected under 35 USC §103(a) as being unpatentable over Ishimaru et al. (U. S. Patent No. 2002/0098432) in view of Yamanaka '467. In this rejection, Ishimaru et al. is applied for its disclosure of the claimed invention with the exception of the specific calixarene compound. Again, Yamanaka is applied for its disclosure of a calixarene charge control agent. This rejection is respectfully traversed.


Ishimaru et al. was filed on March 27, 2001, and is also assigned to Fujitsu Limited. In view of the common ownership, Ishimaru et al. is not prior art to the present application. Furthermore, Yamanaka et al. is directed to a heat roller fixing roller.

For at least the foregoing reasons, the claimed invention distinguishes over the cited art and defines patentable subject matter. Favorable reconsideration is earnestly solicited.

Should the Examiner deem that any further action by Applicants would be desirable to place the application in condition for allowance, the Examiner is encouraged to telephone Applicants' undersigned attorney.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully Submitted,  
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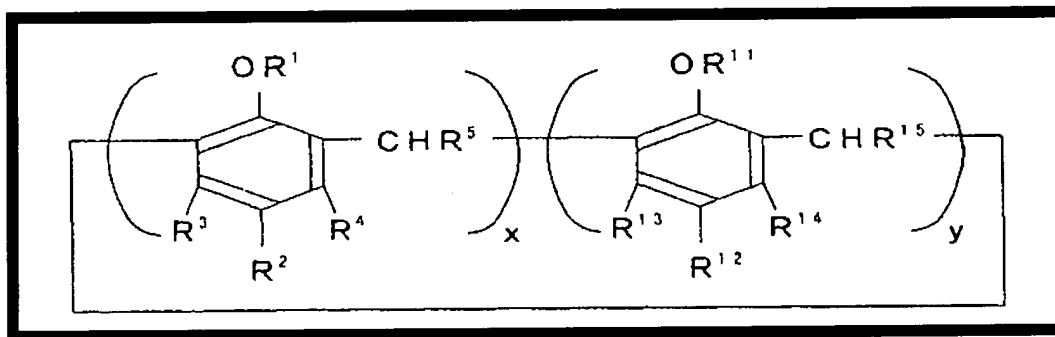
Enclosures: Version with markings to show changes made  
Petition for Extension of Time

**IN THE CLAIMS**

Claims 1 and 4-6 have been amended as follows:

1. (Amended) A photofixing color imaging toner, comprising at least a binder resin [and], a colorant, [which is used in an imaging process employing a photofixing system, said imaging color toner further comprising] and a combination of:

a calixarene compound represented by the following formula (I):



wherein  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$  and  $R^5$  may be the same or different and each represents a hydrogen atom, an alkyl group, a group of  $-(CH_2)_mCOOR^{10}$  in which  $R^{10}$  represents a hydrogen atom or an alkyl group, and  $m$  represents a positive integer, a group of  $-N(R^7)_2$  in which  $R^7$  represents an oxygen atom, a hydrogen atom or an alkyl group, a group of  $-SO_3R^8$  in which  $R^8$  represents a hydrogen atom or an alkyl group, an aryl group or a group of  $-Si(CH_3)_3$ ,

$R^{11}$ ,  $R^{12}$ ,  $R^{13}$ ,  $R^{14}$  and  $R^{15}$  may be the same or different and each represents a hydrogen atom, an alkyl group, a group of  $-(CH_2)_mCOOR^{20}$  in which  $R^{20}$  represents a hydrogen atom or an alkyl group, and  $m$  represents a positive integer, a group of  $-N(R^{17})_2$  in which  $R^{17}$  represents an oxygen atom, a hydrogen atom or an alkyl group, a group of  $-SO_3R^{18}$  in which  $R^{18}$

represents a hydrogen atom or an alkyl group, an aryl group or a group of  $-\text{Si}(\text{CH}_3)_3$ , and  
x and y each represents 0 or a positive integer, and  
an infrared absorbing compound which shows a light absorption peak at a  
wavelength ranging from 700 to 1000 nm,  
wherein the colorant and the infrared absorbing compound are not the  
same.

4. (Amended) The color imaging toner according to claim 1 or 2, [wherein 100 parts by weight of the toner is mixed with] comprising 0.1 to 10 parts by weight of the calixarene compound and 0.01 to 5 parts by weight of the infrared absorbing compound based on 100 parts by weight of the toner.
5. (Amended) The color imaging toner according to claim 1 or 2, wherein the [photofixing system is used] toner is fixable at a light emission energy density ranging from 1.0 to 6.0 J/cm<sup>2</sup>.
6. (Amended) The color imaging toner according to claim 1 or 2, wherein the color toner is [used in] fixed by an electrographic imaging process employing a photofixing system.